

# Comparisons of Job Characteristics

**Focus Occupation:** Chemical Equipment Operators and Tenders (51-9011)

**Associated Occupation:** Chemical Plant and System Operators (51-8091)

Compare Knowledge

Compare Skills

Compare Abilities

Compare Detailed Work Activities

Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 79

**Focus Occupation:** Chemical Equipment Operators and Tenders (51-9011)

**Associated Occupation:** Chemical Plant and System Operators (51-8091)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Production and Processing	6.0	17.6	8.4	<<	Extensive education and/or training may be required
Mechanical	6.8	15.1	9.8	<<	Extensive education and/or training may be required
Chemistry	4.8	12.2	8.4	<<	Extensive education and/or training may be required
Computers and Electronics	8.4	11.6	6.8	<<	Extensive education and/or training may be required
Public Safety and Security	6.9	10.5	8.8	<	Expanded education and/or training may be required
Physics	4.3	7.2	3.5	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 92

**Focus Occupation:** Chemical Equipment Operators and Tenders (51-9011)

**Associated Occupation:** Chemical Plant and System Operators (51-8091)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	15.9	12.9	<	A higher skill level may be required
Operation and Control	5.4	13.6	11.6	<	A higher skill level may be required
Monitoring	9.9	12.9	11.0	<	A higher skill level may be required
Quality Control Analysis	5.9	11.5	8.3	<<	Extensive development of skills in this area may be required
Repairing	3.4	7.5	5.4	<<	Extensive development of skills in this area may be required

Equipment Maintenance	3.5	7.1	6.2	<	A higher skill level may be required
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 90			
Focus Occupation: Chemical Equipment Operators and Tenders (51-9011) Associated Occupation: Chemical Plant and System Operators (51-8091)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Selective Attention	8.7	12.8	10.5	<	Some improvement in abilities may be required
Far Vision	7.8	11.6	8.8	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	11.4	11.4	0	Current ability level may be sufficient
Auditory Attention	5.9	11.1	9.3	<	Some improvement in abilities may be required
Hearing Sensitivity	5.6	10.1	7.3	<<	Extensive improvement in abilities may be required
Response Orientation	4.0	8.8	7.7	<	Some improvement in abilities may be required
Speed of Closure	5.9	8.7	7.1	<	Some improvement in abilities may be required
Gross Body Equilibrium	3.2	6.9	5.8	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 96
<b>Focus Occupation: Chemical Equipment Operators and Tenders (51-9011)</b> <b>Associated Occupation: Chemical Plant and System Operators (51-8091)</b>		
Work Activities	Exclusivity of Activity	
Adjust production equipment/machinery setup	25	
Clean equipment or machinery	20	
Collect samples for testing	58	
Confer with engineering, technical or manufacturing personnel	25	
Direct and coordinate activities of workers or staff	3	
Inspect machinery or equipment to determine adjustments or repairs needed	42	
Maintain consistent production quality	50	
Maintain or repair industrial or related equipment/machinery	39	
Maintain production or work records	19	
Measure, weigh, or count products or materials	17	
Monitor production machinery/equipment operation to detect problems	27	

Operate chemical processing equipment	77
Operate power driven pumps	66
Perform safety inspections in manufacturing or industrial setting	33
Read work order, instructions, formulas, or processing charts	9
Use precision measuring tools or equipment	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 93

**Focus Occupation: Chemical Equipment Operators and Tenders (51-9011)**

**Associated Occupation: Chemical Plant and System Operators (51-8091)**

Tools and Technologies	Exclusivity
Air circulation and parts and accessories	40
Compressors	9
Conveyors and accessories	18
Cooling	51
Electrical measuring and testing equipment	7
Engines	43
Fire fighting equipment	16
Fluid mechanics equipment	11
Hoses	62
Humidity control	70
Hydraulic tools	90
Hydrological instruments	31
Indicating and recording instruments	2
Industrial drying equipment	33
Laboratory decanting and distilling and evaporating and extracting equipment and supplies	19
Liquid and gas flow measuring and observing instruments	15
Meteorological instruments	16
Pumps	9
Safety apparel	4
Tanks and cylinders and their accessories	62
Temperature and heat measuring instruments	6
Water treatment and supply equipment	21

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.